

**WHAT IS CLAIMED IS:**

1. A method for facilitating extensible markup language (XML) enabled information management system (IMS) transactions, comprising:
  - receiving at least one XML input request at an IMS connect program;
  - creating an input request byte array from the at least one XML input request within the IMS connect program; and
  - transmitting the input request byte array from the IMS connect program to an IMS application program.
2. A method as in Claim 1, further comprising:
  - generating at least one output response byte array within the IMS application program;
  - transmitting the at least one output response byte array to the IMS connect program; and
  - creating an XML output response from the at least one output response byte array within the IMS connect program.
3. A method as in Claim 2, further comprising:
  - transmitting the XML output response to at least one user computer connected to the IMS connect program.
4. A method as in Claim 1, wherein the IMS connect program includes a XML processor, and the method further comprises:
  - transmitting the at least one XML input request to a queue header within the XML processor;
  - retrieving an XML input request control block from the queue header by an XML server within the XML processor;
  - invoking an XML adapter routine within the IMS connect program;

invoking a data transformer;  
parsing and translating the at least one XML input request to create an input  
request byte array; and  
transmitting the input request byte array to the XML server.

5. A method as in Claim 4, further comprising:  
transmitting the input request byte array from the XML server to an IMS  
application program; and  
at least partially based on the input request byte array, generating an output  
response byte array.
6. A method as in Claim 5, further comprising:  
transmitting the output response byte array to the queue header within the XML  
processor;  
retrieving an output response control block from the queue header by the XML  
server within the XML processor;  
invoking an XML adapter routine within the IMS connect program;  
invoking a data transformer;  
parsing and translating the output response byte array to create an XML output  
response; and  
transmitting the XML output response to the user computer.
7. A system for facilitating XML enabled IMS transactions, comprising:  
at least one mainframe server;  
at least one IMS connect program residing in the mainframe server;  
at least one IMS application program residing in the mainframe server, the IMS  
application program responsive to the IMS connect program;

wherein the IMS connect program includes logic to:

receive at least one XML input request;  
create an input request byte array from the XML input request; and  
transmit the input request byte array to the IMS application program.

8. A system as in Claim 7, further comprising:  
at least one XML processor within the IMS connect program;  
at least one queue header within the XML processor; and  
at least one XML server within the XML processor.
9. A system as in Claim 8, further comprising:  
an XML initialization routine within the IMS connect program;  
wherein the XML initialization routine is invocable by the XML server.
10. A system as in Claim 9, further comprising:  
an XML adapter routine within the IMS connect program;  
wherein the XML adapter routine is invocable by the XML server.
11. A system as in Claim 10, further comprising:  
an XML terminator routine within the IMS connect program;  
wherein the XML terminator routine is invocable by the XML server.
12. A system as in Claim 11, further comprising:  
a PL/I transformer within the IMS connect program;  
wherein the PL/I transformer is invocable by the XML adapter routine.
13. A system as in Claim 12, further comprising:  
a COBOL transformer within the IMS connect program;  
wherein the COBOL transformer is invocable by the XML adapter routine.

14. A system as in Claim 13, further comprising:
  - a C transformer within the IMS connect program;
  - wherein the C transformer is invocable by the XML adapter routine.
15. A system as in Claim 14, further comprising:
  - a message format services (MFS) transformer within the IMS connect program;
  - wherein the MFS transformer is invocable by the XML adapter routine.
16. A system as in Claim 15, further comprising:
  - a high level assembler (HLASM) transformer within the IMS connect program;
  - wherein the HLASM transformer is invocable by the XML adapter routine.
17. A system as in Claim 16, further comprising:
  - a roll-your-own (RYO) transformer within the IMS connect program;
  - wherein the RYO transformer is invocable by the XML adapter routine.
18. A system as in Claim 17, further comprising:
  - an XML metadata interchange (XMI) repository within the mainframe server, the XMI repository being accessible by the MFS transformer.
19. A system as in Claim 18, wherein the IMS connect program includes an XML processor and at least one data transformer, and the IMS connect program further includes logic to:
  - transmit the XML input request to the queue header;
  - retrieve an XML input request control block from the queue header by the XML server;
  - invoke the XML adapter routine;
  - invoke the at least one data transformer;

parse and translate the XML input request to create an input request byte array;  
and  
transmit the input request byte array to the XML server.

20. A system as in Claim 19, wherein the IMS connect program further includes logic to:

transmit the input request byte array from the XML server to the IMS application program; and  
at least partially based on the input request byte array, generate an output response byte array.

21. A system as in Claim 20, wherein the IMS connect program further includes logic to:

receive an output response byte array from the IMS application program;  
transmit the output response byte array to the queue header;  
retrieve an output response control block from the queue header by the XML server;  
invoke the XML adapter routine;  
invoke the data transformer;  
parse and translate the output response byte array to create an XML output response; and  
transmit the XML output response to a user computer.

22. A computer program device for facilitating XML enabled IMS transactions between at least one user computer and at least one IMS application program, the computer program device comprising logic to:

receive at least one XML input request from the user computer;  
create an input request byte array from the XML input request; and  
transmit the input request byte array to an IMS application program.

23. A computer program device as in Claim 22, further comprising logic to:  
receive at least one output response byte array from the IMS application program;  
and  
create an XML output response from the output response byte array.
24. A computer program device as in Claim 23, further comprising logic to:  
transmit the XML output response the user computer.
25. A computer program device as in Claim 22, further comprising logic to:  
transmit the XML input request to a queue header;  
retrieve an XML input request control block from the queue header;  
invoke an XML adapter routine;  
invoke a data transformer;  
parse and translate the XML input request to create an input request byte array;  
and  
transmit the input request byte array to an XML server.
26. A computer program device as in Claim 25, further comprising logic to:  
transmit the input request byte array from the XML server to an IMS application  
program; and  
receive an output response byte array from the IMS application program.

27. A computer program device as in Claim 26, further comprising logic to:
  - transmit the output response byte array to the queue header;
  - retrieve an output response control block from the queue header;
  - invoke an XML adapter routine;
  - invoke a data transformer;
  - parse and translate the output response byte array to create an XML output response; and
  - transmit the XML output response to the user computer.